REMARKS

This amendment cancels claims 1-16 and 18-29; amends claim 17, and adds new claims 30-33 in accordance with the original disclosure. Support for the claim amendments and new claims is found, for example, in the specification at page 4, lines 16-23; page 5, lines 3-4; page 9, lines 1-4; and page 10, lines 23-24. Claims 17 and 30-33 are now present in this application.

Election/Restriction

As required by the Examiner, Applicants hereby affirm the election, with traverse, of the invention disclosed in original claims 1-17. Claims 18-29 drawn to the non-elected invention have been cancelled.

Rejections Under 35 U.S.C. § 112

Claims 1, 7, 10, 11, 12, and 14 stand rejected for indefiniteness for the reasons set forth in paragraph "2." of the Office Action.

As set forth above, claims 1, 7, 10, 11, 12, and 14 have been cancelled, thereby rendering these rejections moot.

Rejections under 35 U.S.C § 102

Claims 1-5, 7, 8, 10, 14, and 15 stand rejected for anticipation for U.S. Patent No. 5,540,959 to Wang.

As set forth above, Applicants have cancelled claims 1-5, 7, 8, 10, 14, and 15, thereby rendering these rejections moot.

Rejections under 35 U.S.C § 103

Claims 6, 9, 11-13, and 16 stand rejected for obviousness under the teachings of Wang.

As set forth above, Applicants have cancelled claims 6, 9, 11-13, and 16, thereby rendering these rejections moot.

Claim 17 stands rejected for obviousness under the teachings of Wang in view of U.S. Publication No. U.S. 2003/0116091 to Grant et al. (hereinafter

"Grant"). In view of the above amendments and the following remarks, reconsideration of this rejection is respectfully requested.

Claim 17, as amended, is directed to a process for producing an article. The process comprises fluidizing an organometallic solution by atomizing the organometallic solution into an aerosol, passing the fluidized starting material through a hot wall reactor, and forcing the fluidized starting material toward a glass substrate using a moving glass stream. The glass substrate has a temperature between 700°F and 2100°F. The finished article has nano-scaled structures distributed in a surface of the glass substrate or at least partially embedded in the glass substrate.

Wang is directed to a radio frequency (RF) plasma fabrication technique. In this technique, a liquid 10 is charged into a misting chamber 12. Mist 13 from the misting chamber 12 is fed into a plasma region 22 of a plasma reactor 24. In the plasma region 22, the mist 13 is mixed with plasma generated by a plasma gas 26 subjected to radio-frequency radiation. The plasma reactor 24 provides energy to form the plasma and to cause the plasma to react with the mist 13 (Wang at column 4, lines 65 – column 5, line 5). The resulting vapor 44 is propelled upwardly toward a substrate 46 (Wang at column 6, lines 37-38).

Grant is directed to a chemical vapor deposition (CVD) device. In CVD methods, liquid or solid precursors are converted into a gaseous state and then directed toward a substrate. In Grant, a novel CD vaporizer is provided that has a thermal insulator or thermal barrier located between fluid supply components and a vaporization chamber to enable separate control of the temperature and pressure conditions (Grant at paragraph 9).

Firstly, Applicants respectfully disagree with the combination of Wang and Grant. Wang is directed to a RF plasma fabrication technique and Grant is directed to a chemical vapor deposition technique. As would be appreciated by one skilled in the art, these two techniques are quite different and, therefore, Applicants do not believe one of ordinary skill in the CVD art would look to a plasma deposition patent for guidance. However, even if the combination were made, it would not result in the invention as set forth in amended claim 17. Wang teaches combining a mist 13 and a plasma gas 26 in a plasma region 22 where RF radiation causes the

plasma gas 26 to form a plasma, which is reacted with the mist 13. Wang does not teach or suggest fluidizing an organometallic solution and passing the fluidized starting material through a hot wall reactor, as claimed in claim 17. Indeed, the plasma device 22 of Wang is necessary for the Wang plasma deposition technique.

Grant does not overcome the shortcomings of Wang since Grant also does not teach or suggest passing the fluidized material through a hot wall reactor prior to deposition onto a glass substrate. Therefore, claim 17, as amended, is believed patentable over the cited prior art and in condition for allowance. Reconsideration of the rejection of claim 17 is respectfully requested.

Claims 30-33 depend from, and add further limitations to, claim 17. Since these claims depend from a claim believed to be in condition for allowance, these claims are also believed to be in condition for allowance. Additionally, claim 30 lists specific organometallic solutions suitable for the present invention. Claim 33 limits the claimed process to an on-line production system. Applicants do not believe that these limitations are either taught or suggested in the cited prior art.

Conclusion

In view of the above amendments and remarks, reconsideration of the rejections and allowance of claims 17 and 30-33 are respectfully requested.

Respectfully submitted,

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Pittsburgh, Pennsylvania
February 16, 2007

ACS/LNF